

# 2017 STATEWIDE ME&O LOW-INCOME COMMUNITIES SURVEY

**Final Results** 

12/22/2017



# Overarching Research Objectives for the Low-Income Communities Survey

- Compare low-income households to the general population on SW ME&O campaign metrics to determine if the campaign is reaching low-income households to same extent that it is reaching Californians overall
- Expand knowledge of how low-income communities currently manage their energy use, and the barriers to making changes to reduce usage
- Identify differences in the reach of ME&O, and barriers to engaging in energy management among different sub-groups
- Identify trusted information sources for low-income communities, and determine if they vary by sub-group
- Compare the energy management challenges facing renters versus owners within low-income communities



## **Tracking Survey Methodology**

- Conducted a mail-push-to-web, multilingual survey with 1,790 Californians
  - Mailed simple random sample of California residents an invitation to complete survey on-line or call phone center to complete survey with telephone interviewer
  - Followed letter invitation with two post-card reminders
- Response rate: 19%
- Respondents could complete the interview in either English, Spanish, or Chinese
  - English: 1,757
  - Spanish: 23
  - Chinese: 10
- Field dates: 9/29/2017 10/23/2017
- All results weighted to California statewide population in terms of age, income, education, and ethnicity



## **Low-Income Survey Methodology**

- Conducted a mail-push-to-web, multilingual survey with 1,197 Californians
  - Sent survey invitations to an oversample of households in census tracts using select census data that goes into the CalEnviroScreen score
  - Oversampling focused on socioeconomic status (poverty, housing burden, education) and linguistic isolation
  - Sampling strategy resulted in more completed surveys with low-income (40% low-income survey vs. 30% tracking survey) and non-English speaking respondents (6% low-income survey vs. 2% tracking survey)
  - Response rate: 11%
- Respondents could complete the interview in either English, Spanish, or Chinese
  - English: 1,121
  - Spanish: 69
  - Chinese: 7
- Field dates: 11/10/2017 12/06/2017
- All results weighted to California statewide population in terms of age, income, education, and ethnicity



## **Combined Surveys**

- Results from both surveys did not differ on key metrics such as brand awareness,
   and a combined dataset with results from both surveys was used for analysis
- Combined response rate: 15%, n=2,987
- All results weighted to California statewide population in terms of age, income, education, and ethnicity
  - In some cases, questions were only asked on one survey. To address this, separate weights were constructed for the tracking survey, low-income communities survey, and combined datasets and these weights were used with the questions corresponding to each dataset.



## **Low-Income Community Profile**



## Definition of low-income comes from the ESA Income Guidelines

Household Size	Income Eligibility Upper Limit
1-2	\$32,040
3	\$40,320
4	\$48,600
5	\$56,880
6	\$65,160
7	\$73,460
8	\$81,780
Each additional person	\$8,320

Source: http://consumers.cpuc.ca.gov/esap/



Low-income respondents are more likely to be Hispanic, unemployed, housingburdened, apartment renters, and living in a household with an individual with a disability

Low-income respondents are more likely to be:

#### **Hispanic**

64% of low-income respondents are Hispanic (vs. 27% of non-low-income

#### **Unemployed**

11% of low-income respondents are unemployed (vs. 2% of non-low-income)

#### Housing-Burdened

62% of low-income respondents spend more than half of their yearly income on housing costs (vs. 33% of non-low-income)

Living in a household with a individual with a disability

34% of low-income respondents live in a household with an individual with a disability (vs. 17% of non-low-

income)

#### **Apartment Renters**

67% of low-income respondents are renters (vs. 34% of non-low-income) 39% of low-income respondents live in apartments (vs. 25% non-low-income)

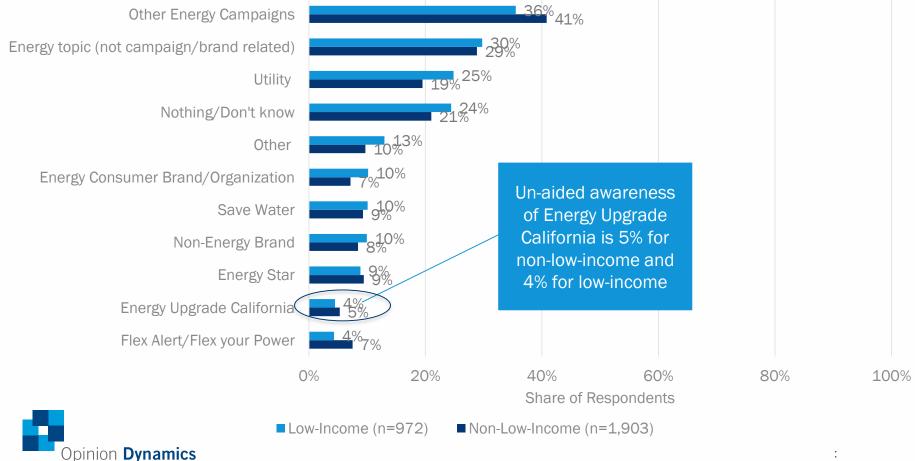


# Energy Upgrade California Campaign and Low-Income Communities

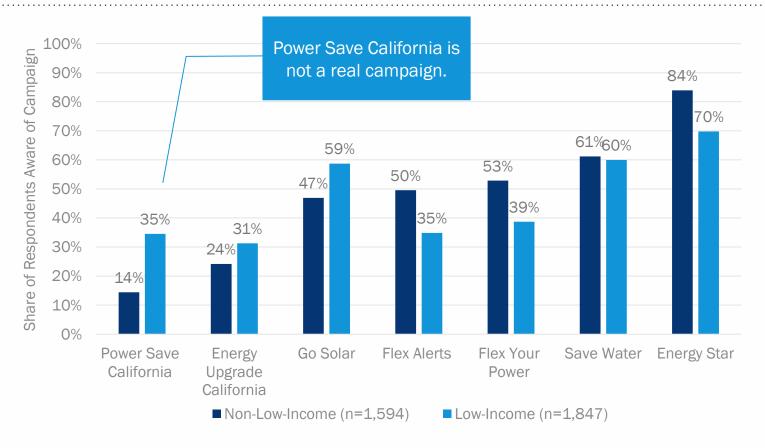


## Low-income respondents have similar unaided brand awareness of Energy Upgrade California and other brands

When you think of brands, campaigns, or initiatives that encourage Californians to save energy, which ones come to mind?

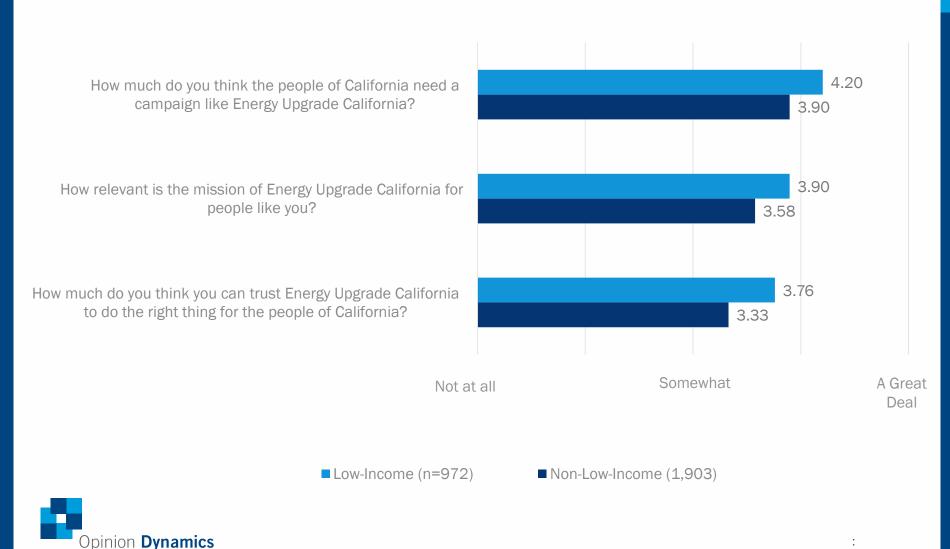


## While low-income respondents show higher aided awareness of Energy Upgrade California, there is concern about social desirability bias

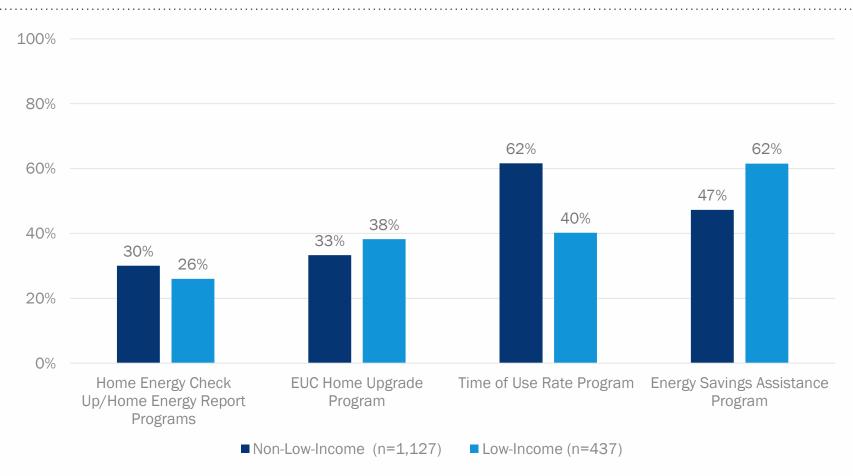


Note: Lower income respondents show greater awareness for both Energy Upgrade California and Power Save California, which is not a real brand, but lower awareness of other more established brands. This suggests that low-income respondents may feel more pressure to report being aware of brands when they are actually are not.

# Low-income respondents are more likely to believe in the relevance and importance of Energy Upgrade California and trust the brand



# Low-income respondents have different levels of awareness of campaign priorities



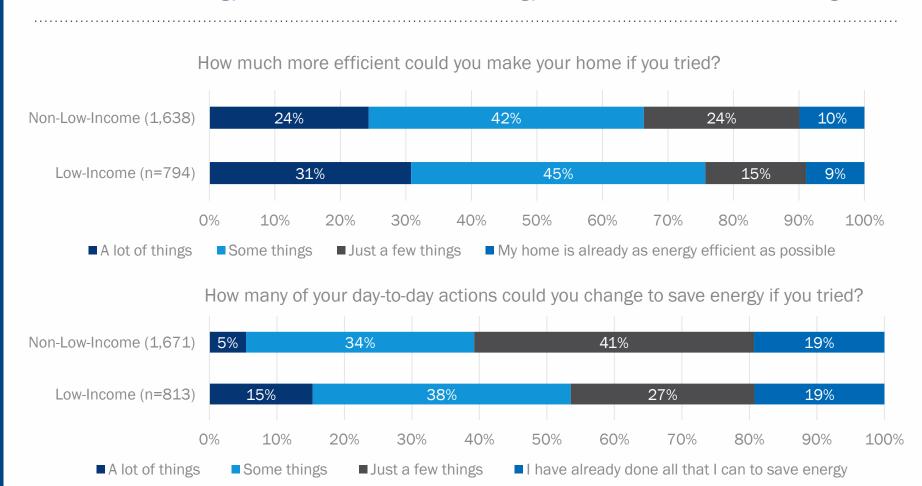
Note: The data for awareness of the Energy Savings Assistance Program comes from the Low-Income Communities Survey (n=702 non-low-income and n=464 low-income). The data source for the other three programs is the 2017 ME&O Tracking Survey

# Low-Income Communities and Energy Management

Low-income respondents show strong interest in making changes to save energy in the home, but may require more assistance



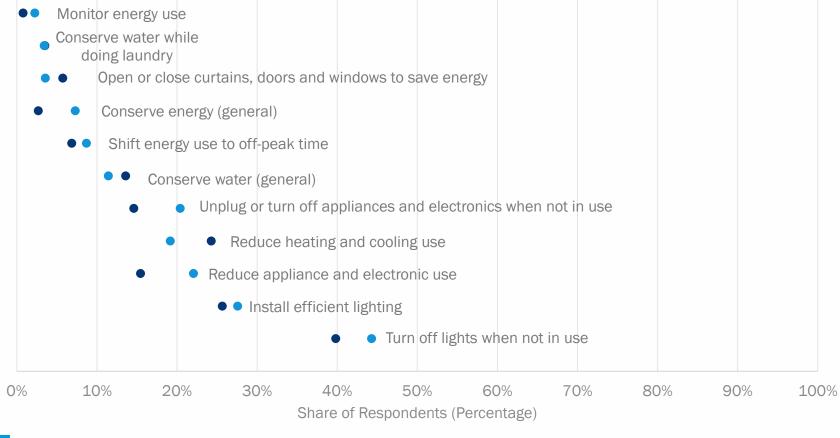
## Low-income respondents believe they have more opportunities to make their homes more energy-efficient and make energy-efficient behavioral changes





# Low-income and non-low-income respondents suggest they can change similar behaviors to save energy (unaided)

What changes could you make to your day-to-day actions to save energy?





Non-Low-Income (n=1,903)

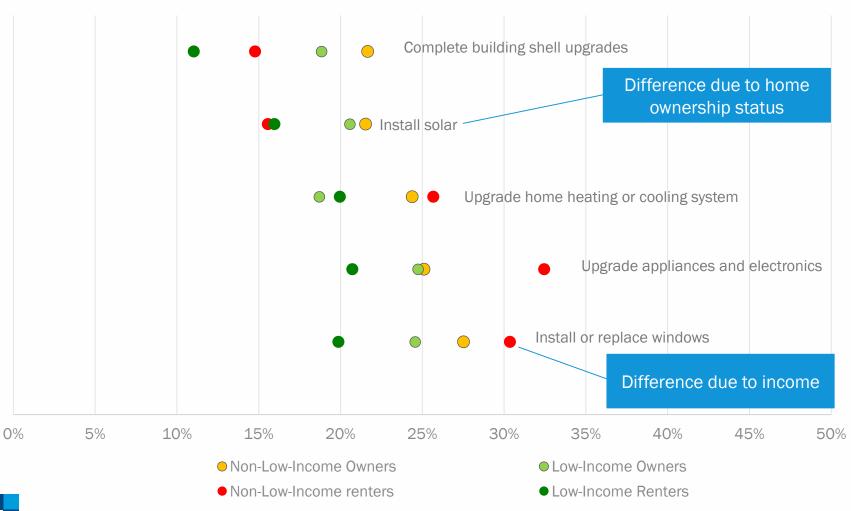
• Low-Income (n=972)

## Low-income respondents are less likely to suggest they can make medium or high cost energy-efficient purchases or upgrades

What changes could you make to your home to make it more energy efficient? Install efficient pool pump Install smart or programmable thermostat Upgrade hearth technologies Install new doors Complete building shell upgrades Install solar Upgrade home heating or cooling system Upgrade appliances and electronics Install or replace windows 0% 10% 20% 30% 60% 70% 40% 50% 80% 90% 100% Share of Respondents (Percentage) Non-Low-Income (n=1,903) • Low-Income (n=972)

Opinion **Dynamics** 

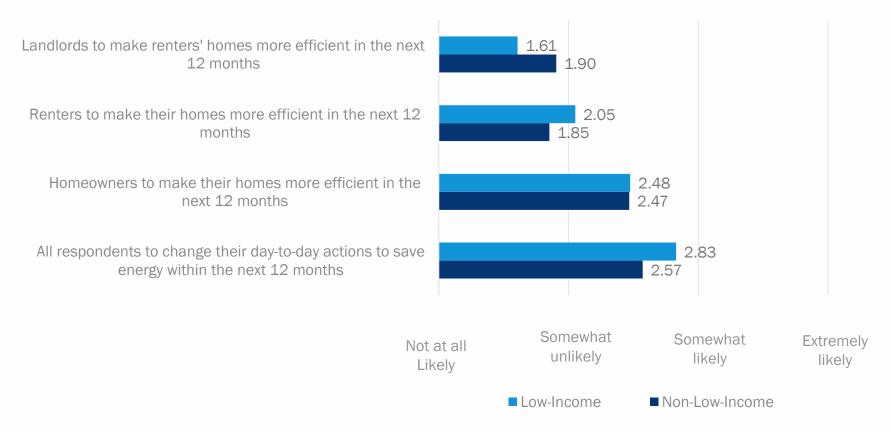
# Home-ownership status and income-level can both be barriers to making medium or high-cost energy purchases or upgrades





Low-income respondents are more likely to make changes to their day-to-day behaviors to save energy and less likely to believe their landlords will make energy-efficient upgrades

How likely are...



Notes: Renters; n=446 non-low-income, n=488 low-income, Owners; n= 1,192 non-low-income, 306 low-income, All n=1,671 non-low-income and 813 low-income)

Opinion **Dynamics** 

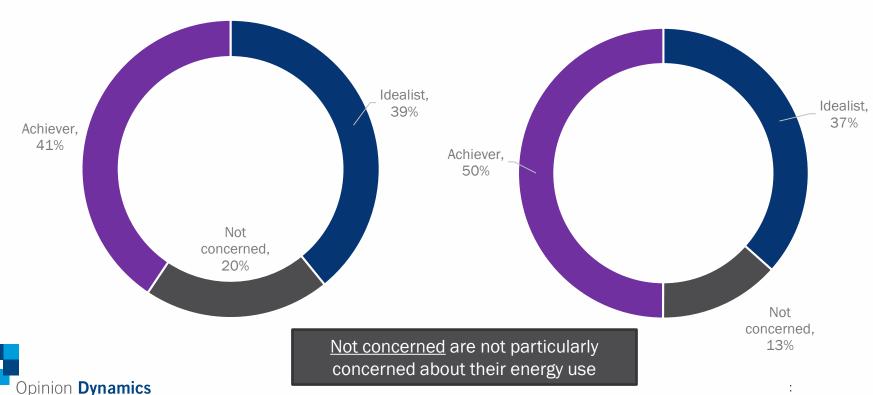
## Low-income respondents are more likely to be energy conservation achievers

Achievers make an effort to live in ways that reduce their energy use all the time and are particularly concerned about their energy use

Non-Low-Income (1,903)

<u>Idealists</u> are particularly concerned about their energy use but do not make an effort to live in ways that reduce their energy use all the time

Low-Income (n=972)

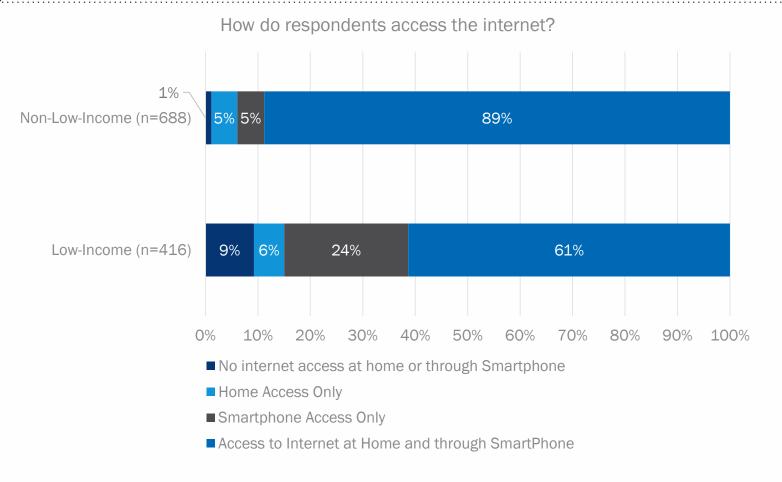


## **Low-Income Community Barriers**

There is a "digital divide" between lowincome respondents and non-low-income respondents for technology that allows for participation in future programs



Access to the internet is not a barrier to information for low-income respondents but their mode of internet access may be a barrier to participation in future programs

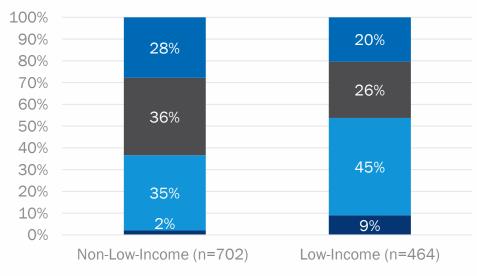




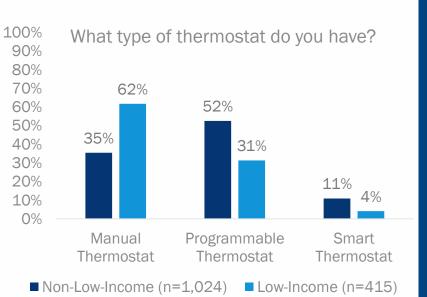
53% of low-income respondents have broadband at home vs. 90% of non-low-income respondents (n=702 non-low-income and 464 low-income)

## There is a "digital divide" between low-income respondents and non-low-income respondents for technology that allows for participation in future programs



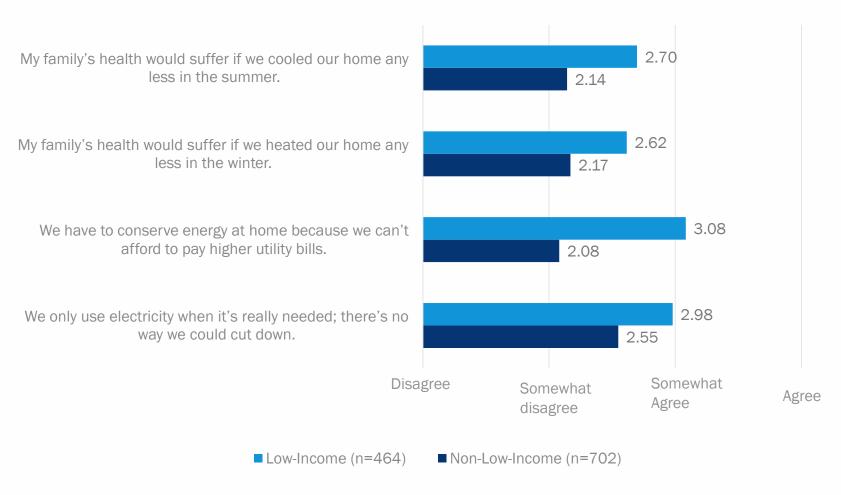


- My household owns a smart home device
- Have heard of them and know a lot about them but do not own one
- Have heard of them before but don't know much about them
- Have never heard of them before





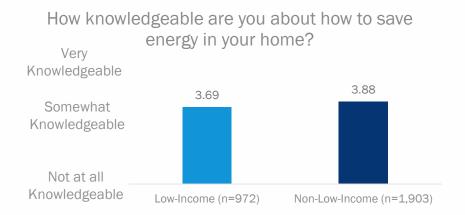
### Low-income respondents have a higher level of energy insecurity



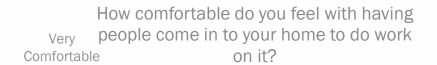


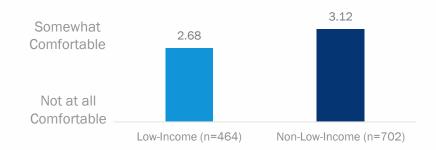
## Lack of knowledge about how to save energy and concern about having contractors come into the home may be barriers for low-income respondents

Low-income respondents are slightly less knowledgeable about how to save energy in the home



Low-income respondents are less comfortable having people come in to their home to do work







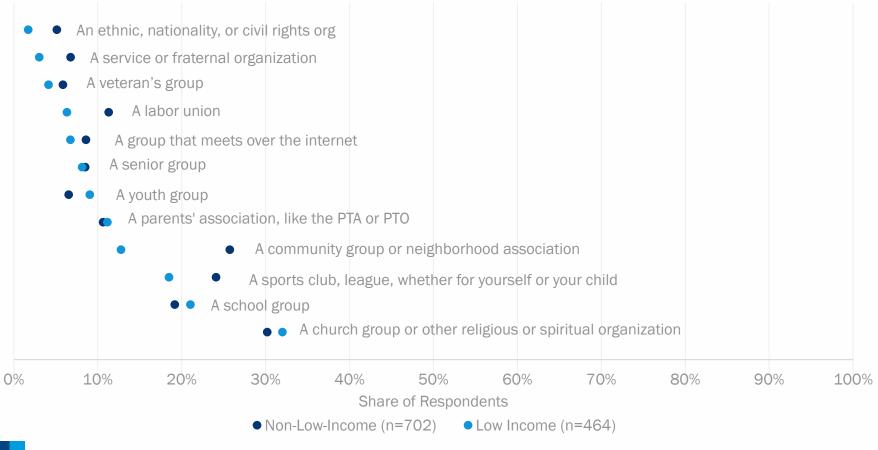
## Reaching Low-Income Communities: Information Sources and Community Connections

Low-income communities can be reached through religious groups and social media



## Low-income respondents are most frequently involved with churches and other religious and spiritual organizations. They are less likely to be involved with community groups

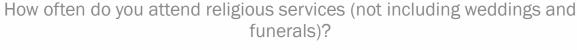
In the past 12 Months have you been involved with any of the following groups?

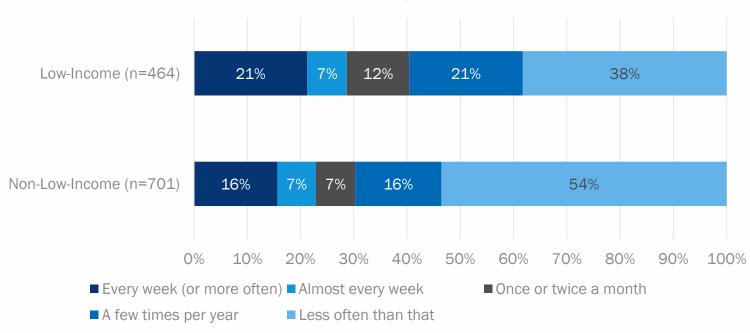




# Low-income respondents attend religious services more frequently than non-low-income respondents

 35% of low-income respondents say they are a member of a local church, synagogue, or other religious or spiritual group (vs. 34% of non-low income respondents)

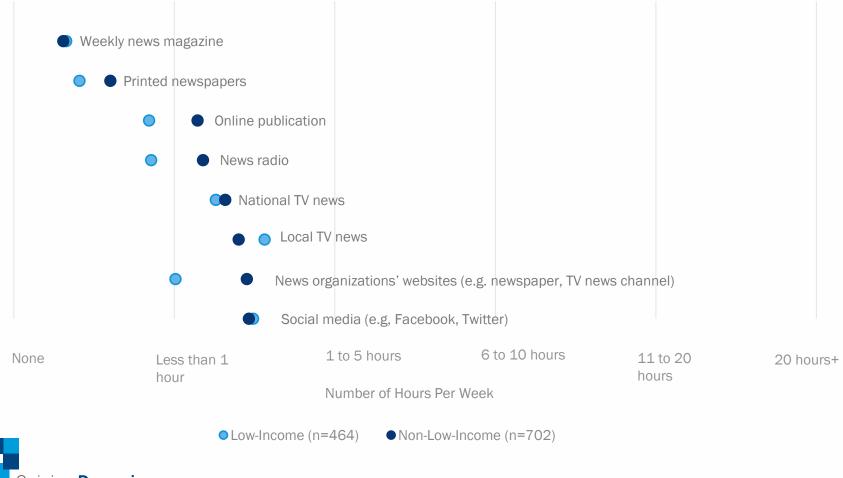






## Low-income communities can be targeted through local TV news advertisements and social media

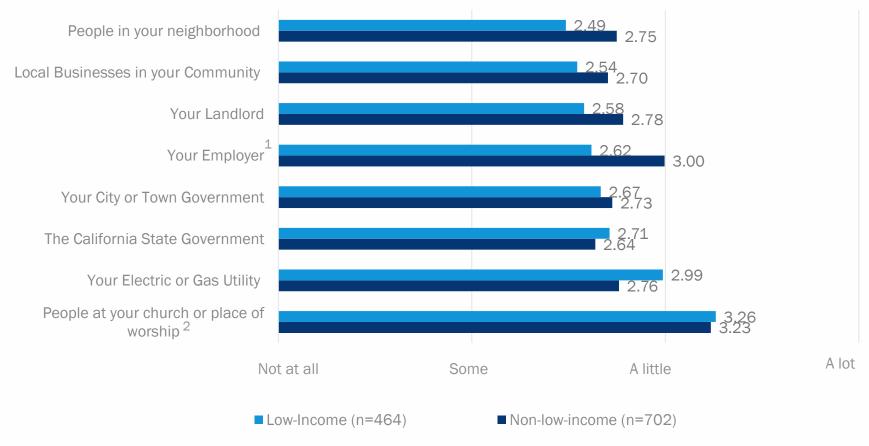
How many hours per week do you spend using each of the following sources to keep up with the news?





# Low-income communities can also be targeted through religious groups and formal institutions such as utilities and governments

How Much Do You Trust Each of the Following Sources?

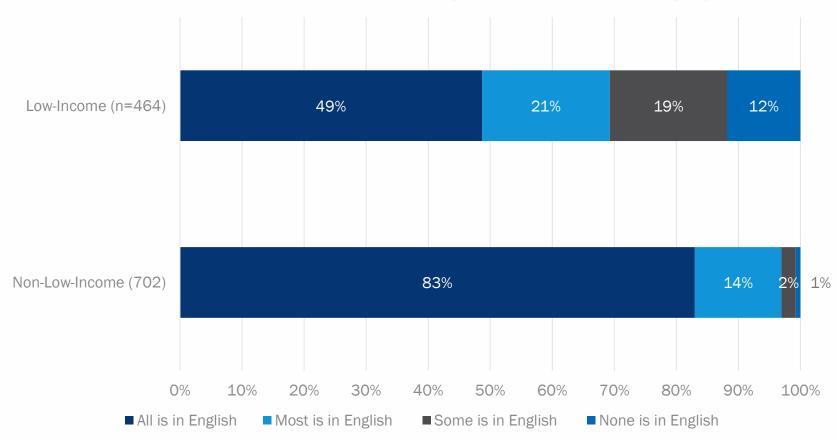


Notes: 1. Questions about landlords were only asked of renters (n=212 non-low-income, n=295 low-income)
2. Questions about people at your church or place of worship were only asked of those respondents that attend church or a place of worship (n=232 non-low-income, n= 172 low-income)



# Low-income respondents are more likely to receive their news in a language other than English







# Recommendations for Energy Upgrade California ME&O Campaign Target Demographic



## Target demographic customers would be prime candidates for Energy Upgrade California marketing

- We profiled customers who have the greatest need and likelihood of changing their actions and behaviors to save energy or the "target segment"
- Target demographic customers are likely to be receptive to Energy Upgrade California marketing.
- Customers in the target demographic were selected based on their potential change their actions and behaviors to save energy and their level of concern about managing their energy usage
  - Level of concern about managing energy usage was the greatest predictor of whether or not respondents frequently made an effort to live in ways that reduce their energy use on the 2017 ME&O Tracking Survey



The target segment is particularly concerned about their energy use and believe there are opportunities to change their actions and behaviors.

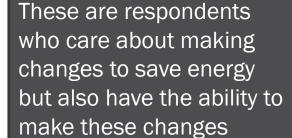
Respondents in the target demographic have a high potential to save energy in their home or change their actions to save energy

When asked how many changes they could make to their home or to their daily actions to save energy, target demographic respondents said "a lot of things"

Target demographic respondents also stated they are "particularly concerned about managing their energy use"



25% of respondents are in the target demographic (n=2,587)





## Respondents in the target demographic are more likely to be lesseducated, low-income, young, and renters

Respondents in the target demographic are more likely to be:

#### Renters

57% of respondents in the target demographic are renters (vs. 38% of non-target demographic respondents)

## Living with a family member with a disability

25% of respondents in the target demographic have someone in their home with a disability (vs. 22% of non-target demographic respondents)

#### Low-Income

43% of respondents in the target demographic are low-income (vs. 29% of non-target demographic respondents)

### Less Educated

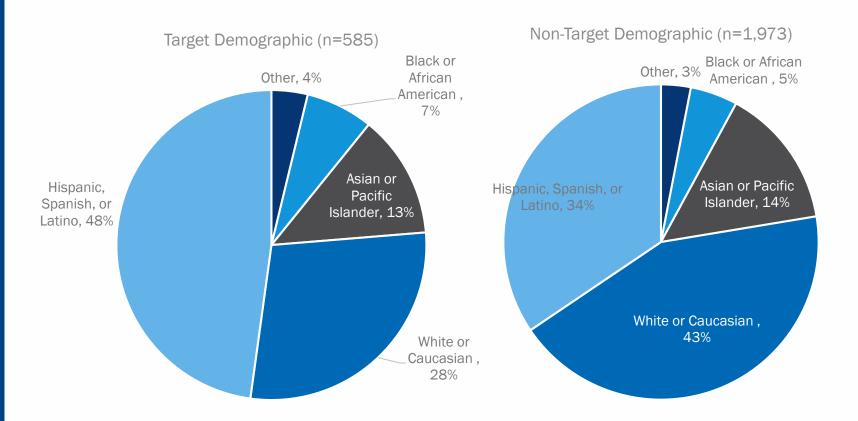
37% of respondents in the target demographic have no college education (vs. 27% of non-target demographic respondents)

#### <u>Younger</u>

The median age of respondents in the target demographic is 43 (vs. non-target demographic median age of 51)



# Respondents in the target demographic are more likely to be Hispanic and African American and less likely to be White





# Target demographic energy management actions and energy conservation beliefs follow similar patterns to results from low-income respondents

- The target demographic is more likely to:
  - Believe Energy Upgrade California is relevant, necessary, and trustworthy
  - Feel prideful when they save money on their energy bill
  - Believe it is important for others to view them as environmentally conscious
  - Have a higher likelihood of making changes to their home and daily actions to save energy
  - Believe in the importance of environmental challenges like climate change
  - Are interested in participating in smart thermostat and TOU programs
  - Worry about not having enough money to pay their energy bills
  - Are knowledgeable about how to save energy in their home and feel like they have control over how much energy their home uses



## Reaching the target demographic

- The target demographic is less likely to get their news from traditional sources (TV, radio, newspapers) and more likely to get their news from social media
- The target demographic is more likely to trust information coming from people at their church or place of worship
- Respondents in the target demographic feel less attached to their city or town
- Respondents in the target demographic are less likely to have internet at home, but more likely to have a smart phone



#### Recommendations

- Consider expanding the use of social media and advertisements on local TV news as campaign channels
- Consider expanding outreach through organizations that low-income individuals know and trust, like religious or spiritual groups
  - Low-income communities can be reached through more formal sources (utilities, government. etc), which they trust over community groups and other local organizations.
  - Develop strategies to ensure that low-income respondents are not being left behind with the introduction of new utility programs that rely on smart devices
- Focus ME&O efforts on reaching the target demographic



## Appendix

Detailed findings by subgroup

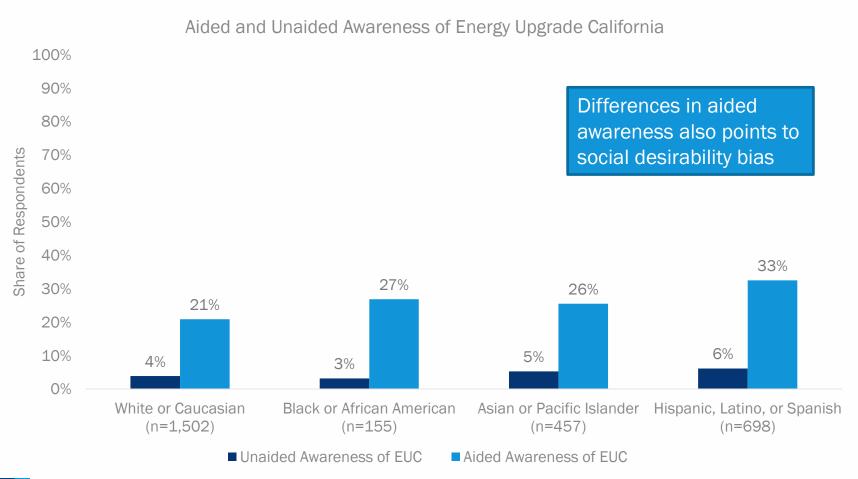


## Race

Racial minority energy management results tend to follow similar patterns to results from low-income respondents



## Unaided awareness is similar across all ethnic groups and differences in aided awareness may be due to social desirability bias





# Racial minority energy management results tend to follow similar patterns to results from low-income respondents

- Minorities are more likely to:
  - Believe Energy Upgrade California is relevant, necessary, and trustworthy
  - Be less knowledgeable about how to save energy in their homes
  - Feel prideful when they save money on their energy bill
  - Feel like they have control over the energy their household uses
  - Have opportunities to make their homes more efficient and make behavioral changes to save energy
    - These respondents also believe these are changes that they could make personally vs. changes their landlord could make
  - Believe in the importance of doing their part to make California more energy efficient
  - Worry about paying their energy bills (especially African Americans and Hispanics



## Disability

Households with a member with a disability are more concerned about paying their energy bills and have less ability to conserve energy through heating and cooling due to health risks



# 23% of respondents reported having at least one person in their household with a disability (n=2,968)

Disability	Share of Respondents
Does anyone 5 years of age or older have serious difficulty walking or climbing stairs? (n= 2,954)	9%
Because of a physical, mental, or emotional condition, does anyone in your household 5 years of age or older have serious difficulty concentrating, remembering, or making decisions? (2,961)	9%
Because of a physical, mental, or emotional condition, does anyone in your household 15 years of age or older have serious difficulty doing errands alone such as visiting a doctor's office or shopping? (n=2,953)	8%
Does anyone in your household deaf or have serious difficulty hearing? (n=2,965)	7%
Is anyone in your household blind or have serious difficulty seeing even when wearing glasses? (n = 2,955)	5%
Does anyone 5 years of age or older have serious difficulty dressing or bathing? (2,945)	4%
Have at least one disability (n=2,968)	23%



# Respondents from households with a disability are more likely to be older, retired, low-income, and less-educated

Respondents with someone in their household with a disability are more likely to be :

#### Older

29% of respondents from a household with a disability are over age 65 vs. 16% non-disability

#### Retired

36% of respondents from a household with a disability are retired vs. 16% non-disability

#### Low-income

51% of respondents from a household with a disability are low-income vs. 29% non-disability

#### **Less-educated**

23% of respondents from a household with a disability have a college degree vs. 41% non-disability



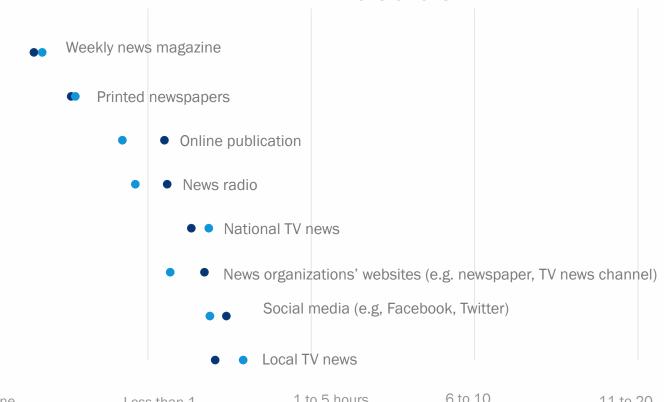
## Households with family member with a disability do not differ from households with a family member without a disability on beliefs about energy conservation

- Respondents with at least one member in the household with a disability did not differ from households without a member with a disability in regards to:
  - Importance of being seen as energy conscious
  - Knowledge about how to save energy in the home
  - Beliefs about the importance, relevance, and necessity of Energy Upgrade
     California
  - Belief in the importance of environmental challenges



## Households with an individual with a disability are more likely to keep up with the news through traditional media sources

How many hours per week do you spend using each of the following sources to keep up with the news?



None

Less than 1 hour

1 to 5 hours

6 to 10 hours

11 to 20 hours

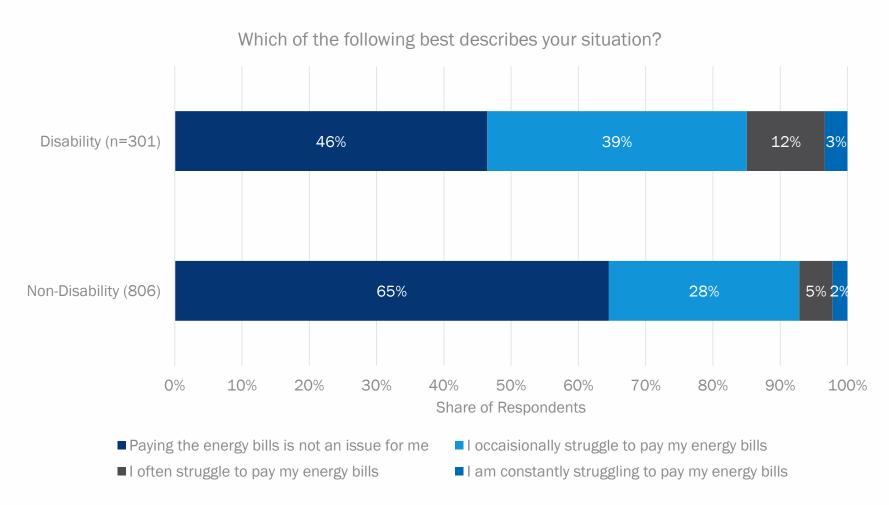
20 hours+

Number of Hours Per Week

Non-Disability (n=887)Disability (n=301)

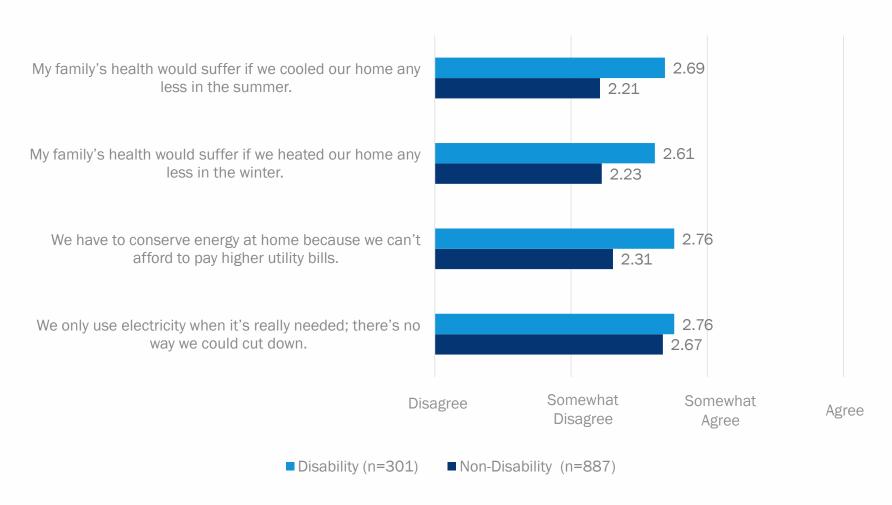


# Households with an individual with a disability are more concerned about paying their energy bills





# Households with a member with a disability have less ability to conserve energy through heating and cooling due to health risks





# Non-English Speakers



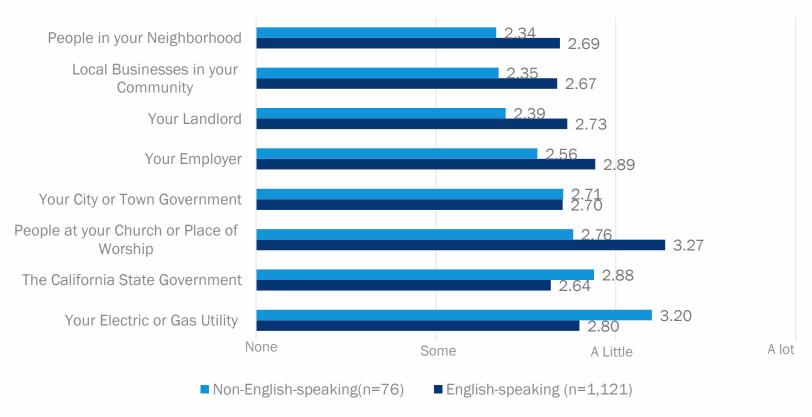
# Non-English-speaking respondents are similar to low-income respondents and their response patterns are intensified

- 4% of respondents answered the survey in a language other than English (n=109)
- 87% of non-English-speaking respondents are low-income (vs. 30% non-english-speaking)
  - 44% of non-English speaking respondents have household incomes of less than \$20,000 per year (vs. 12% English-speaking)
- Non-English-speaking respondents are more likely to:
  - Lack access to technology (63% of non-English-speaking respondents have smart phones and 21% have access to broadband internet at home)
  - Be highly motivated to save energy and believe they have the ability to make changes to save energy
  - Have a high level of concern about environmental issues and the amount of energy they use
  - Have less knowledge about how to save energy in the home



# Non-English-speaking respondents are more likely to trust formal information sources such as governments and utilities

How much do you trust each of the following sources?







### **Project Contacts**

Hannah (Arnold) Howard

Managing Director, Opinion Dynamics

<a href="mailto:hhoward@opiniondynamics.com">hhoward@opiniondynamics.com</a>

Tami Buhr
Vice President, Opinion Dynamics
<a href="mailto:tbuhr@opiniondynamics.com">tbuhr@opiniondynamics.com</a>

